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ABSTRACT

Attrition and completion was studied at an open university, the Athabasca University in Canada. The multiple-choice and open-ended questionnaire asked students to indicate why they withdrew or completed the course and to specify the conditions under which they could pursue their studies. Of the 58 questionnaires mailed, 55 percent of the withdrawal questionnaires and 86 percent of the completion questionnaires were returned. Six areas that may have policy implications are: pacing/timeline restrictions on student progress, range of advanced course offerings, credit-noncredit options, course improvements, stop-out students, and open admissions. A literature review on variables related to attrition or completion and on attrition or completion variables in distance education is provided. The following terms are defined and discussed: nonstart, persister, suspension, extension, completion, transfer, graduation, withdrawal, attrition, dropout, and attrition rate. (SW)

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# Attrition - Completion Study in an Open University


## Abstract

This paper describes the results of an attrition and completion study at an open university. The questionnaire used in this study asked students to indicate why they withdrew or completed the course and to specify the conditions under which they could pursue their studies. Of the 58 questionnaires mailed, 55% of the withdrawal questionnaires and 86% of the completion questionnaires were returned. The findings impact many subdivisions of the university. Six areas emerged as having possible policy implications. These include pacing/timeline restrictions on student progress, range of advanced course offerings, credit/non-credit options, course improvements, stop-out students, and open admissions. The findings should be beneficial to academic planners and administrators.



Hammer, P., & Smith, W. A. S. Attrition - Completion Study in an Open University. a paper ~~to be~~ presented at the conference of The Association of Institutional Research, San Diego, May 13 - 17, 1979.

This paper consists of a short literature review, a definition of attrition and related terminology, and the results and discussion of an attrition and completion study at an open admission distance education university.

Various attrition or completion rates have been reported in the literature. According to Iffert's (1957) American nationwide survey, the graduation rate was less than 40% at all degree-granting institutions. Astin (1973: 306) focusing on the entering students at one institution, predicted a 50 percent dropout rate but found one of 75 percent. Harrington (1977: 73), in The Future of Adult Education examined the new opportunities for off-campus credit and noted that in home study courses the dropout rates have been shockingly high, often over 90 percent. In a registry report of Athabasca University 305 new Athabasca University student enrolments in home study courses during October and November 1977 were analyzed by enrolment status effective August 27, 1978. It was found that 55.4% of the students had withdrawn without credit. A concern with reducing attrition has resulted in a variety of studies examining variables that are thought to be associated with this phenomenon.

Variables Related to Attrition or Completion

Astin (1973) examined several student characteristics, including high school grades, standardized test scores, family background, mother's educational attainment,

parental income, racial and ethnic characteristics and the plans and aspirations of the student. He noted that poor high school grades and low standardized test scores, increase the probability that the student will drop out. Within the category of family background variables, mother's educational attainment had an influence on student's persistence. The career goal of the student also represents a positive factor in persistence. Environmental experiences influencing completion or attrition included financial assistance, type of accommodation and type of post-secondary institution attended. Astin (1973) found that financial support in the form of a scholarship or grant enhances students' chances of completion whereas financial support from home is less effective. Dormitory living and attending a small, highly selective institution also increase the likelihood of persistence.

Tinto (1975) listed characteristics of the family, characteristics of the individual himself, educational experiences prior to college or university entry, and expectations concerning future educational attainments as important characteristics related to attrition or, conversely, to completion. Investigations of the relationship of the family's socioeconomic status and education, demonstrated that class membership is a strong determinant of university attendance and that socioecenomic status is inversely related to attrition (Eckland, 1964; Tinto, 1975; Kohen, Nestel & Karmas, 1978). Eckland (1964),

Sewell and Shah (1967) among others noted that high school grades and measures of scholastic aptitude are generally recognized as the most reliable predictors of academic achievement and graduation. Educational aspiration, once the individual's ability is taken into account, is recognized as the strongest independent influence upon university completion (Tinto, 1975; Spaeth, 1970).

Peng and Fetters (1978) developed a model in which varying background characteristics, personal attributes, and environmental influences interact to affect withdrawal behaviour. The following eleven variables were used as criteria: socioeconomic status, sex, race, high school curriculum, high school achievement, academic ability, educational aspiration, employment, scholarship recipient, loan recipient and university achievement. They found that "persisters differ from withdrawals in most of the variables except for sex and loan recipient" (Peng & Fetters, 1978: 366).

Attrition or Completion Variables in Distance Education

The preceding attrition studies dealt with students in traditional colleges or universities. However, at an open university like Athabasca University some student characteristics related to attrition may be less pertinent and others of greater importance. For example, the socioeconomic status of the parents and their approval may

be less relevant to an adult who decides to enrol at an open university. Similarly, financial assistance to a correspondence student who is employed full-time may be less crucial. Depending on the time span between leaving high school and entering university, high school grades may less accurately reflect the academic skills of the individual.

The adult learner may have different expectations of learning and teaching and of the ultimate purposes of the educational experience. In an open distance education university some students pursue their studies on a part-time basis while working. The learning conditions after eight hours of work are different (Schäfer, 1978). Furthermore, poor academic performance of an adult learner may be more seriously perceived and may shatter self-confidence since it cannot be balanced with good performance in another subject. If an adult is willing to engage in learning despite of these difficulties he must see a purpose in his studies. As a possible result of the goal-orientation in his studies, whether personal or professional, an adult may wish a careful differentiation and statement of objectives in a course. Depending upon his relationship to society and his position in it, the adult may also be less willing to be guided (Schäfer, 1978).

De Goede and Hoksbergen (1978) established a profile of evening (or working) students and identified the

following requirements conducive for studying. It is essential that the family support the idea of studying, attendance be regular, work (outside regular working hours) not absorb too much time and attention, and regular working hours exist. Similar requirements may apply to correspondence students.

The following obstacles were identified as deterrents for working adults to complete successfully their studies. Besides lack of time and overburdening because of the combination of working and studying, there were other problems which hampered progress such as "too little or no time for friends, acquaintances, housekeeping, relaxing", "problems regarding health", "too little support and advice from teachers", "problems regarding finances", "adverse working conditions", "dissatisfaction with the job", "little contact with teachers, students", "too many social obligations" (De Goede & Hoksbergen, 1978: 451).

The nature of distance education itself may contribute factors for attrition. Harrington (1977: 67) mentions that high on the list of reasons for failure of much of distance education is the sense of loneliness that brings discouragement to adults studying on their own. This lack of contacts with fellow students and an instructor in a classroom is handled in the distance education mode in a variety of ways. Students may be brought together on occasion, usually during the summer, for residential

seminars. Another way of introducing some personal contact is by using educational radio and television, video or audiotapes, records, and filmstrips. Depending on the media used, students can see or at least hear the teacher's voice. Personal interaction is further increased by two-way radio, or telephone. The universities of Wisconsin, Illinois, and Quebec, among others, have demonstrated the value of telephone hookups for classes and academic conferences (Harrington, 1977: 67). To facilitate personal interactions, local or regional learning centres provide off-campus students the opportunity to meet with fellow students, consult reference books, obtain tutorial and counselling help, and study.

Fees may also influence the enrolment or re-enrolment of low-income adults. Harrington (1977: 66) noted that higher education must resist pressure to increase fees and must provide financial aid for deserving part-time distance students. The quality and appeal of correspondence courses may also influence in a significant way the retention rate of students in a distance education institution.

## Definitions

The different attrition or completion rates reported in the literature may be a result of problems in defining "attrition", "dropout" and related terminology and the formula employed. A review of the terminology related to attrition and completion follows.

Nonstart

A special withdrawal category has been identified in the literature as nonstart. A nonstart has been defined as a student who cancels his registration before submitting any assignments (Orton, 1977). At Athabasca University course enrolments occur on a continuous basis any time throughout the year. Courses with television or radio components must be taken in accordance with broadcast schedules. Certain science courses with lab sessions, or courses with workshops or group discussions require enrolment at specified times. In junior-level home-study courses, enrolment occurs in two phases. The first phase is the introductory enrolment. It allows the student to take the first credit of the course and permits the student to assess the extent to which the course satisfies personal requirements. In most cases, the introductory enrolment package must be completed within two months of enrolment. Once the introductory phase is completed, the student may enrol permanently. For advanced courses no introductory packages are available. At Athabasca University a nonstart could occur in the introductory enrolment phase in junior courses or at any time in advanced course offerings.

Persister

At Athabasca University students have twelve (12) months to complete a six-credit home-study course and six

(6) months to complete a three-credit home-study course. In this context individuals who have completed the introductory package and continue with the course until completion will be referred to as persisters.

Suspension

Students may suspend, or postpone course study for up to six months. Only one suspension period per course is allowed. Suspension, or postponement, of course study is not permitted in instructor-delivered or tele-conference courses or in home-study courses that have a strictly scheduled laboratory or television component. This temporary withdrawal has also been described as stopout (Krazer, 1977).

Extension

Course extensions are not permitted in instructor-delivered or tele-conference courses. Extensions may be allowed in home-study courses. A student requesting extension could not complete the course in the allowed 12 month period; a student requesting suspension from a course, wishes to interrupt his studies for a specific time. Delayed completion of a course will result if a student needs more time to work through the course or interrupts his studies.

Completion

Completion refers to a student whose registration is not cancelled before the final examination within the allowed time span. Orton (1977: 21) suggested the following formula to calculate completion rates:

$$\frac{\text{Completion}}{\text{Total Registration} - \text{Total Nonstarts}} \times 100 = \text{Completion Rate}$$

instead of

$$\frac{\text{Completions}}{\text{Total Registration}} \times 100 = \text{Completion Rate}$$

Retention Rate

The retention rate is expressed as the percentage of students who completed a course and continue with another one.

Transfer

A young university, Athabasca is very much in the process of course development. Given the relatively small number of course offerings, transfer equivalents for almost all course offerings exist. The purpose of the transfer program is to help students to obtain credit toward a degree program at another university. Thus, a student in a transfer program is not considered a dropout student, although he or she does not remain an Athabasca University student.

Graduation

Athabasca University offers undergraduate credit courses and programs to adult Albertans. All degree programs require 90 course credits for completion. This is equivalent to a three year degree at more traditional universities. Students who complete degree requirements and who are entitled to receive degrees from Athabasca University will be officially granted those degrees at the first convocation held following completion of their studies.

Withdrawal

Withdrawal may occur at different points within the progression through a course. A student may withdraw at his request with or without having completed the introductory package requirement. In those courses in which credit is awarded at this stage, a student may withdraw at his or her own request with or without credit. Once permanently enrolled a student may withdraw at his or her own request with or without having obtained credit(s). Parallel to the withdrawal initiated at the student's request, a student may be withdrawn by Athabasca University from the active student record file with or without credit.

The reasons for withdrawal can be classified broadly as personal or institutional. Institutional reasons for withdrawal may include: lack or inadequacy of university

services to students (counselling, career planning, course and/or program advice, registrarial services, tutor/instructor services and financial advice); incompatibility of the learner's style with the instructional methodology of a distant delivery university; and variety and quality of course offerings. Personal reasons for withdrawal, not including academic failure, can be infinite. Within this category, withdrawal may be temporary, if the individual has the intention of returning to university, or withdrawal may be permanent. Permanent withdrawal may result if students are satisfied with what has been learned and do not wish to go further or if they feel that an alternative form of investing time, energies, and resources will yield greater benefits, relative to costs, or greater satisfaction than pursuing studies at a university.

Attrition

Attrition is defined as a reduction in student population chiefly as a result of resignation.

Dropout

A dropout refers to the person who drops out of school and by extension to the person who drops out of any postsecondary institution. Pantages and Creedon (1978) report that most of the earlier studies were cross-sectional and therefore defined a "dropout" as any student

who was previously enrolled at the college, but not enrolled at the time of the study. The connotation of attrition, withdrawal or dropout covers a wide continuum of emotions ranging from negative to neutral. A dropout has been considered positively only when the meaning implies stop-out or temporary withdrawal.

Attrition Rate

Attrition rate has been variously defined as the percentage of students lost to a particular devision within a college, lost to the college as a whole, or lost to higher education as a whole (Summerskill, 1962). The calculation of the attrition rate will differ depending upon the definition of who should or should not be included. Eliminating non-starts, stop-outs and transfer students will affect the attrition rate. Furthermore, withdrawing from a particular course may not mean withdrawal from the university. The student may enrol in another course. Continuous course enrolments throughout the year complicates the calculation of course attrition or completion rates.

Attrition Study -- 1978

The study reported here is part of an on-going study on student attrition. The overall purpose of such a study is to identify and describe variables which contribute to student withdrawal so that institutional changes to reduce

the attrition rate, and conversely to increase the completion rate, may be made.

In an attempt to ascertain possible variables that cause students to withdraw, it was decided to survey students who withdrew during January, February and March 1978. The questionnaire designed for this survey asked students to indicate reasons for withdrawal and to specify the conditions under which they could pursue their studies.

The Questionnaire

The instrument used to gather the information was a multiple-choice and open-ended questionnaire. In the construction of the questionnaire care was taken to observe guidelines for questionnaire construction (Oppenheim, 1966). In addition, withdrawal questionnaires as designed by The Open University, Institute of Education Technology (1975, 1976) and by the Empire State College, Saratoga Springs, New York (1977) were consulted. After use in a pilot study during 1976/77, the questionnaire was revised for use as a permanent attrition instrument.

In answering the questionnaire, the respondent is first asked to state whether he or she is enrolled in other post-secondary courses at other institutions, to indicate to what extent he made use of services related to program planning, tutor assistance, financial aid at Athabasca University and if he made use of it to what extent he found

the service helpful. He is also asked to indicate why he enrolled in a course at Athabasca University. Next, the student is asked to indicate when he thought of withdrawing, with whom if any one he discussed his decision, what general problems influenced him to withdraw and to check off or to list specific reasons. Finally, the student is asked questions about what, if anything, he or she has gained from his/her experience with the course from which he/she withdrew and what could be done differently to help keep students from withdrawing.

Methodology

A mail survey was conducted May 30, 1978 of students who withdrew from Psychology Today and World Ecology during January, February and March 1978. Of the 29 questionnaires mailed May 30, 1978, 55 per cent or 16 questionnaires were returned by August 10, 1978. Two students attached a letter to the questionnaire. Six students who withdrew from Psychology Today and ten students who withdrew from World Ecology replied. Seven male and nine female students returned the questionnaire.

Demographic Student Characteristics

The following information was received concerning the employment of respondents: seven worked full time, three part time, two were students elsewhere, one was unemployed and one was retired.

The following occupation categories were reported: three of the respondents were homemakers, one was a manager/administrator, one indicated the teaching profession, one the clerical profession, and no one the draftsman/lab assistant/ technician category. Seven respondents specified their occupation. Occupations included a summer job as a researcher of public administration at Blue Quills, a chief ranger with Alberta Forest Service, an unskilled labourer, an institutional aide at a group home at Michener Centre in Red Deer, a full time taxi lease operator and a trailer plant worker.

Nine respondents indicated that they were enrolled in educational courses at other post-secondary institutions whereas five respondents indicated that they were not. Of the fifteen alternatives specifying educational courses in the questionnaire, six alternatives were checked: one student took high school level courses, four students were enrolled in university credit courses, one in agriculture, one in managerial skills, one in professional skills, and one in biblical studies. One student specified aviation as a course not listed in the alternatives.

The age of the respondents ranged from 22 years of age to 65 years of age. The frequency of respondents whose birthday fell within the 1909 - 1919 range was one, two respondents within 1930 - 1939, seven respondents within 1940 - 1949 and six respondents within 1950 - 1959. The

birthdate of the majority of respondents (N=13) was between 1943 - 1957, that is, in the 21 to 35 age bracket.

Questionnaire Results

Not one of the respondents indicated the requirements of the employer or to up-date and refresh subject knowledge as reasons for having enrolled in a course. Interest and self-improvement were given as the most frequent reasons followed by preparation for future career change. Desire for an Athabasca University degree and for credit transfer to other institutions were selected with equal frequency (N=5). One student noted that he enrolled in an Athabasca University course in order to be exposed to another method of teaching/learning. Another wrote: "Originally I had intended to take your degree (Gen. Studies), but your system was simply not conducive for my needs."

Of the student services available, the tutor/instructor service was considered helpful to the majority of students who sought this service. Generally few respondents sought university services. One student noted that the university services were not helpful to him. He wrote: "I asked 5 times for a calendar describing courses and degree contents. It was always avoided by tangents directed to other objectives."

Nine respondents knew that they could suspend temporarily from their course but five students did not

consider this alternative. Five students did not know of this possibility.

One student indicated that he first thought of withdrawing from the course right after orientation, seven as soon as they started the introductory package, two after completing the introductory package, no one after completing the first examination and one student after completing two or more exams. Two students indicated that they were not sure they wanted the course in the first place. One student wrote that he didn't think of withdrawing "-- it just happened as time".

Relatively few respondents consulted others about withdrawal from their course. Some respondents did not reply to this question. Of the students who responded to this question, the tutor, spouse or friend were the most significant persons, according to frequency, with whom they consulted about their decision to withdraw.

General problems which influenced the respondents' decision to withdraw varied: two students listed demands of the course, one needed more help from the tutor, two had problems with the instructional package, five had personal problems, three noted job related problems, and two listed no problems.

Responses to 19 out of 25 possible specific reasons for withdrawal were obtained. Of the choices home

responsibility and lack of time to study were listed as the most frequent specific reasons for withdrawal. Six students indicated the intention of re-enrolling at some future date.

Except for one respondent all of the respondents indicated that they gained from the course from which they withdrew. No one of the respondents indicated that the course was a completely negative experience. Six students indicated disappointment at not having completed the course, six students indicated that for the work they did they learned a lot, two students indicated that they realized the course did not fit their needs and so enrolled in a more appropriate course, two students indicated increased self-confidence, four students indicated that they would have done better in the course if not for personal problems. One student noted that he had doubts about the organization of Athabasca University.

Students listed a variety of improvements. One suggested improving the content of the course; another the organization of the course; eight suggested providing more opportunities for group meetings; four increasing tutor contact and accessibility; three suggested making learning centers more accessible; two suggested lessening the "red tape"; one student suggested improving assessment procedures, and no one suggested increasing counselling services. Two specific comments were made: "Provide more

information about the course." and "I feel that if a person takes a full course load, and approaches it seriously, the time involved in study time rules out working, especially full-time. Therefore better financial help would probably be of benefit. Especially in my case."

Findings of the Attrition Study

Generally respondents did not make extensive use of the university services nor did they generally suggest that the courses should be improved. Predominantly, respondents listed lack of time as a reason for their course withdrawal.

Completion Study -- 1978

A parallel study serving as a control study to the attrition study examined students who completed the course Psychology Today or World Ecology during the same time span from January until March, 1978. The overall purpose was to identify and to describe variables which contribute to course completion. The completion questionnaire paralleled the attrition questionnaire except, instead of specifying the reasons for withdrawing, students were asked to tell us why they completed and to specify the conditions under which completion could be facilitated.

Methodology

Questionnaires were mailed to 15 students who

completed the Psychology Today course and 14 students who completed the World Ecology course during January, February and March 1978. Of the 29 questionnaires mailed out May 31, 1978, 86 per cent or 25 questionnaires were returned by August 10, 1978. Fifteen students who completed the Psychology Today course and ten students who completed the World Ecology course replied. Ten male and fifteen female students returned the questionnaire.

Demographic Student Characteristics

The following information was received concerning the employment of respondents: fourteen students indicated that they work full time, three part time, four were students elsewhere, one was unemployed and three were retired.

The following occupation categories were reported: six of the respondents were homemakers, four were teachers, two were secretaries, one was a scientist, two were draftsmen, and one was a farmer. Six respondents specified their occupations as: registered nurses, geotechnical technologist, oil worker and forest officer.

Ten respondents indicated that they were not enrolled in educational courses at other post-secondary institutions whereas fifteen respondents indicated that they were. Of the fifteen alternatives listed in the questionnaire, specifying educational courses, eleven alternatives were checked: thirteen students were taking university credit

courses, one technical skill training, one managerial skills, three professional skills, two civics, one religious studies, two safety courses, one home and family living, 4 personal development, three hobbies, and three sport and recreation courses.

The age of the respondents in the completion study ranged from 21 years of age to 78 years of age. One respondent was born between 1900 - 1909, one respondent between 1910 - 1919, two respondents between 1920 - 1929, four respondents between 1930 - 1939, twelve respondents between 1940 - 1949 and five respondents between 1950 - 1959. The majority of respondents were in the 30 to 39 age bracket (N = 12) followed by respondents in the 20 to 29 age bracket (N = 5).

Questionnaire Results

In order of decreasing frequency, the following reasons were given for taking a course at Athabasca University: interest and self-improvement (N=21); preparation for future career change or career goal (N=12); desire to obtain an Athabasca University degree (N=10); or credit transfer to other institutions (N=10); to meet the requirements of the employer or profession (N=6); to up-date and refresh subject knowledge (N=5); or to advance in a profession (N=4).

The number of students not seeking any university

services was higher than the number of students seeking the services. The service helpful to the greatest number of students was the tutor service, followed by registrarial service, course advice, counselling for career planning and program advice. One respondent indicated that the counselling service, when sought, was not helpful. Two students indicated that counselling for career planning was not available when they enquired and one student specified that program advice was not available. Three students made specific comments: "Very slow service." "I feel it is very adequate." "I was concerned that it took a full year for my advanced credit assessment to be processed."

The tutor-student relationship appears to have been generally good as the ratings show. Twenty-one students indicated that the tutor facilitated their learning experience, one student did not reply to this question and three students indicated that the tutor did not facilitate their learning experience.

Unanimously, respondents indicated that they were satisfied with their course. In general, the majority of students' comments indicated that the instructional materials were adequate or superior. All of the respondents indicated that they gained from the course which they completed. Not one of the respondents indicated that the course was a completely negative experience. Eighteen students indicated that for the work they did they learned

a lot, fourteen students indicated that their experience with the completed course influenced their choice to enrol in additional courses, seven respondents indicated increased self-confidence, and two students indicated that they would have done better in the course if not for personal problems.

To the question, what could Athabasca University do to help students complete the course, eleven students suggested providing more opportunity for group meetings, nine students suggested making learning centers more accessible, eight students suggested increasing tutor contact and accessibility, three students suggested lessening the "red tape", one student suggested increasing counselling services, no one suggested improving assessment procedures, and four students stated that the courses were good and required no change.

Findings of the Completion Study

A combination of factors may have contributed to a student's successful completion of a course taken at Athabasca University. Among these factors previous educational experience, motivation and quality of the Athabasca University courses appear to have contributed to students' course completion. Harris (1975: 367) noted that home study students are on the average a highly motivated and self-selected minority and that strong motivation can often overcome earlier neglect and delayed academic

maturity. Also, an individual's entrance to university at his or her own wish has been identified as a factor contributing to completion (Heywood, 1976: 188).

Attrition - Completion Study Comparison

Student responses to the same questions in both the attrition and completion questionnaires were analyzed using the chi-square statistic. The response pattern relating to demographic student characteristics, reasons for taking a course, the extent to which respondents found Athabasca University services helpful if they made use of it, experience gained, and suggested course improvements were examined. Student responses on the attrition and completion questionnaires were not significantly different concerning demographic characteristics, reasons for enrolling at Athabasca University, and suggestions for course improvements. The chi-square value 1.97 for demographic student characteristics was associated with a probability of 0.92; with respect to reasons for taking a course at Athabasca University the chi-square value of 8.03 resulted in a probability of 0.33; and for course improvements the chi-square value 5.02 resulted in a probability of 0.54. Of the university services only the chi-square value 8.57 for registrarial services was statistically significant ($p = 0.01$). The chi-square value 13.78 was statistically significant ($p = 0.03$) with respect to the difference of experience gained for students who withdrew and those who

completed.

## Implications of the Attrition and Completion Study

Six areas emerge from the data as having policy implications:. the open admission policy, stopout students, advanced course offerings, pacing/time limits, course improvements and credit/non-credit options. These are considered below in greater detail.

### Open Admission Policy

Athabasca University has an open admission policy. The only entrance requirement is that a student be eighteen years of age or older. The annual attrition rate at a traditional university where entrance requirements include a certain grade average from high school has been estimated to be 25 per cent (Kramer, 1977). Payer (1978) noted that the attrition rate is related to the selection system. If faculty members have a role in selecting students, a lower dropout rate is recorded; if no selection is exercised the dropout rate is high. With the open admission policy at Athabasca University, eligibility does not depend upon academic credentials. Attrition may not be only a result of a heterogeneous student body in terms of academic skills, ability and experience, but may be also a result of the unavailability of a desired academic program, or ignorance or misconceptions about academic support services. In a non-traditional distance learning university, students may

in addition experience a "strain of studying while working" (Harris, 1975: 367). Since admission to Athabasca University does not depend upon a pre-determined level of ability required for university course work, individuals may apply without the necessary skills to successfully complete the course work. Thus, a fraction of attrition may be ascribed to a lack of screening students according to their abilities, previous learning and needs. It would be interesting to determine the percentage of attrition related to the open admission policy. In the attrition study two respondents indicated that their previous educational experiences did not provide sufficient background for the course.

Stopout Students

Students who withdraw for a given time but intend to re-enrol at a later date are stopouts. In the attrition study six students indicated that they intend to come back at some future date. It should be kept in mind that the opinions expressed by the respondents to the questionnaire at one point in time do not necessarily mean a commitment to return on the part of the respondents. It would be interesting to verify at some later point in time whether stopout students actually returned.

Advanced Course Offerings

Since Athabasca University has degree granting status

and since there are students who wish to obtain a degree from Athabasca University, it is desirable to develop and offer a variety of courses. In the attrition study five students expressed interest in a degree from Athabasca University and in the completion study ten students. Five students in both the attrition and completion studies wanted to obtain credit transfer to other institutions. From our continuing needs assessment (course interest) study, the request for advanced courses for which the junior ones are available is evident. The retention rate may be affected if a student could complete his degree with Athabasca University courses.

Pacing/Time Limits

Research indicates that a student's completion of a course depends upon his ability to move at a steady rate through the course materials (De Goede & Hoksbergen, 1978; Tosti & Wilson, 1972). It is desirable to determine the least and greatest amount of time needed to work through the instructional units of the home-study courses. This information may help students to allot their study time to meet the course requirements within the twelve months time limit for a six credit course. Dowie (1978) suggested a student scheduling program. It consists of calculating the time required to complete a course unit by determining the relative difficulty of each course unit, the time required to complete the assignments; and to write the examinations.

She writes:

> When the tutor talks to a student for the first time, the student scheduling program is described to him. The merits of the program are explained, and the student is asked if he wants to have a schedule made up for him. If he does, the tutor asks him the date by which he would like to have the course completed. It is emphasized that schedules are meant to guide studying, and are not intended to be a non-negotiable constraint.

The time limits for course completions can be modified with suspension or extension to allow for the individual differences and the particular circumstances of our student population.

Course Improvements

Respondents to the attrition questionnaire suggested the following improvements: firstly, to provide more opportunities for group meetings, secondly, to increase tutor contact and accessibility, and thirdly, to make learning centers more accessible. The request for increased opportunities for group meetings and tutor contact and accessibility point to the traditional teaching-learning mode of a teacher with students in a classroom. Respondents to the completion questionnaire also desired more opportunities for group meetings. However, availability of learning centers was more frequently requested than tutor contact and accessibility. It would be interesting to examine the requests in a follow-up study to determine the extent of modifications the above-mentioned improvement categories may warrant and would be in keeping with the

mandate of Athabasca University.

### Credit/Non-Credit Option

Athabasca University provides students with the option of taking a course for credit or non-credit. Not every adult who enrols in a credit course will take the course to earn a degree or seek the course goals which have been predetermined by the course developers. Some may discontinue satisfied with what they learned and that the effort was worthwhile without wishing to go any further. In the attrition as well as the completion study there were individuals who had already completed a degree and may have wanted to take a university level course for interest.

## Conclusion

The questionnaire results showed that reasons for taking a course at Athabasca University varied; interest and self-improvement, pursuit of a future career goal, and transfer to another institution were most frequently cited. This finding is consistent with Carp, Peterson and Roelfs' (1973) study. They noted that to gain knowledge, personal fulfillment and job-related reasons are the most frequently endorsed reasons for learning. Students differed in their educational background and the type of courses they were presently taking. Of the student services available, the tutor/instructor service was helpful to the majority of students who sought this service. Consistent with De

Goede's et al (1978) enumeration of obstacles to complete successfully university course work, respondents specified home responsibilities and no time to study as the most frequent reasons for their withdrawal. The majority of students who completed the course indicated that the instructional materials were adequate or superior. Responses to both the attrition and completion questionnaires indicated that students considered the opportunity for group meetings as an improvement. In keeping with Tinto's (1975: 120) suggestion that research should look at the longitudinal process of attriton as reflected in follow-up data it should be mentioned that the attrition and completion studies at Athabasca University become part of our overall student tracking system.

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